



College Preparation for African American Students:

Gaps in the High School Educational Experience

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College degree attainment is regarded as a primary solution to reduce poverty and close wealth gaps between people of color and whites in the United States. With the changing labor market and a more globalized economy, a far greater number of jobs require a postsecondary credential. By 2020, it is estimated that two-thirds of jobs will require college experience, with 30 percent of those jobs requiring at least a bachelor's degree and 36 percent of jobs requiring at least some college or an associate degree (Carnevale, Smith & Strohl, 2013). More students must attend and complete college to keep pace with this employer demand. However, many African American young people graduate high school unprepared for the rigors of college. As the demographics of the United States shift and a majority of our nation's students are children of color, their failure in school and lack of preparation for postsecondary opportunities have significant implications for the American labor market and economy.



College and career readiness for high school students is a major focus of the education reform movement. One of the biggest challenges that must be addressed through college and career readiness reform is the grave disparity in preparation for certain racial and ethnic sub-groups, as well as low-income and first-generation college students. In particular, African American students are far less likely to be ready for college, with those in high-poverty schools being the least prepared (ACT, 2013). Over the last decade, this phenomenon has been measured numerous ways, including SAT scores, Advanced Placement course taking and exam passage, enrollment in rigorous

mathematics and science courses, high school graduation rates, and high school exit exams (Camara, 2013; Musoba, 2011).

Much of the discussion about college readiness for African American students has centered on the deficiencies of students, families, and communities. Lack of academic achievement for African American students is often attributed to environmental and cultural differences that impact school performance (Stewart, 2007). However, equal focus must be given to deficiencies and disparities in school systems, particularly those with high-minority populations. The United States Department of Education Office of Civil Rights (2014a, 2014b) has

released data quantifying the deep disparities in high schools in three key areas that are critical for college readiness: the level of coursework available, the experience level of the teachers, and access to guidance counselors. Child and youth development is influenced by social factors in the home, community, and school. As such, a comprehensive analysis of academic achievement requires a framework that addresses both personal and systemic influences, including individual and community poverty, family stability, and school structures (Stewart, 2007). Understanding these factors is critical to developing effective policies and practices that improve college readiness.



Research and data on disparities in high school policy and practice elevate an issue that is often ignored or discounted in education reform discussions. Far too frequently, African American students are thought to be unfit for college and directed to low-wage work or trade schools following high school completion. However, the primary reason these students lag behind their peers is that their schools provide inadequate courses, resources, and supports. Better understanding the differences in what low-minority and high-minority schools offer to students can provide a foundation for reforms that yield more college-ready students from all racial backgrounds.

This paper highlights three primary educational issues of importance to college readiness: access to rigorous college preparatory courses, experienced teachers, and school counselors. It also highlights the tremendous disparity in access to these core elements between high-minority and low-minority schools. Finally, this paper suggests potential implications for future policymaking related to schools serving primarily African American students.

Defining College Readiness

College readiness is the combination of core academic knowledge, skills, and habits that youth need to be successful in a postsecondary setting without remedial coursework or training (Lombardi, Seburn, & Conley, 2011). College and career readiness isn't solely determined by the courses one takes; students must also understand college culture, have strong study habits, and know how to access supports (Lombardi et al., 2011). The four elements of college readiness are cognitive strategies, content knowledge, academic behaviors, and contextual skills and awareness (Conley, 2010).

Cognitive strategies are ways of thinking and processing information that are necessary for college-level work. They include intellectual openness, inquisitiveness, analytical skills, construction of well-reasoned arguments, evaluation of varied or conflicting perspectives, precision and accuracy, formulating hypotheses, and developing problem-solving strategies (Conley, 2010).

Content knowledge is the core knowledge in all subject areas that serves as the foundation for future learning. Mastery of basic concepts in English, mathematics, science, social studies, world languages, and the arts provide students with the context and basis for processing more rigorous material. Appropriate research strategies and methodologies to explore and answer problems, as well as expository, descriptive, and persuasive writing skills, allow students to explore all subject areas and express themselves clearly (Conley, 2010).

Academic behaviors are those behaviors that reflect student self-awareness, monitoring, and control. Students should be able to demonstrate ownership of the learning process by setting goals, seeking help, persisting in courses, and appropriately communicating with teachers. This also includes study skills, such as time management, prioritizing coursework, good note taking, organization, and successful participation in study groups (Conley, 2010).

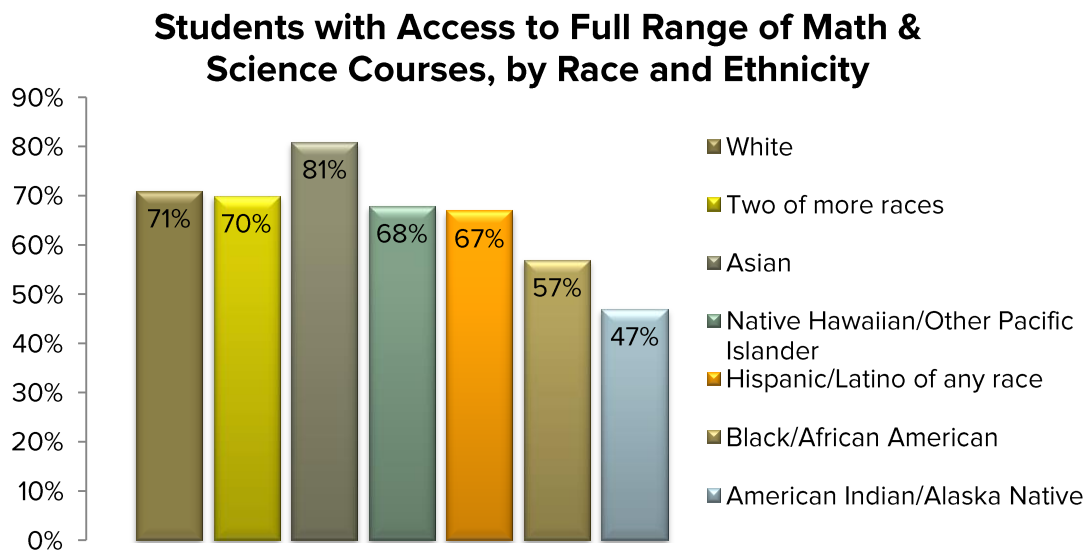
Contextual skills and awareness refers to the specific understanding of how college operates as a system, as well as college culture. Understanding expectations and how to interact with professors and peers is critical. Students also need knowledge to select an appropriate college, navigate the application and admissions processes, obtain financial aid, register for classes, and address other details (Conley, 2010).

Access to Rigorous Coursework

Students need access to high-level courses with quality instruction to prepare them for the rigors of college by increasing their content knowledge and cultivating their higher order thinking skills. The relationship between taking more coursework, particularly mathematics, and college readiness is well established (Howell, 2011; Musoba, 2011). Students who have access to college-level academics in high school are more likely to seek and succeed in higher education (McGee, 2013; Roderick, Coca, & Nagaoka, 2011). Many college outcomes are shown to be significantly influenced by successful Algebra II completion. (Gaertner, Kim, Des Jardins, & McClarty, 2013; Long, Iatarola, & Conger, 2009).

Far too many high-minority schools do not offer these courses, making it impossible for students to garner the academic skills necessary to enter and succeed in college. As Figure 1 shows, only 57 percent of African American students attend schools where they have access to the full complement of courses necessary to be college ready.

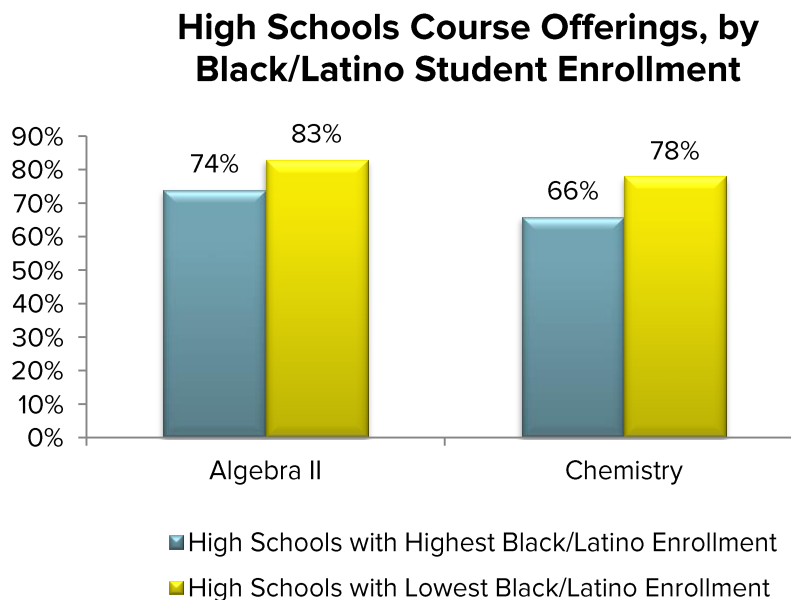
Figure 1. Students with Access to Full Range of Math & Science Courses, by Race and Ethnicity



Source: United States Department of Education, Office of Civil Rights. (2014). *Civil rights data collection data snapshot: College and career readiness.*

The United States Department of Education defines the full complement of courses as: Algebra I, geometry, Algebra II, calculus, biology, chemistry, and physics (2014a). Similarly, Figure 2 shows that high schools with the highest African American and Hispanic enrollments are less likely to offer courses such as Algebra II and chemistry.

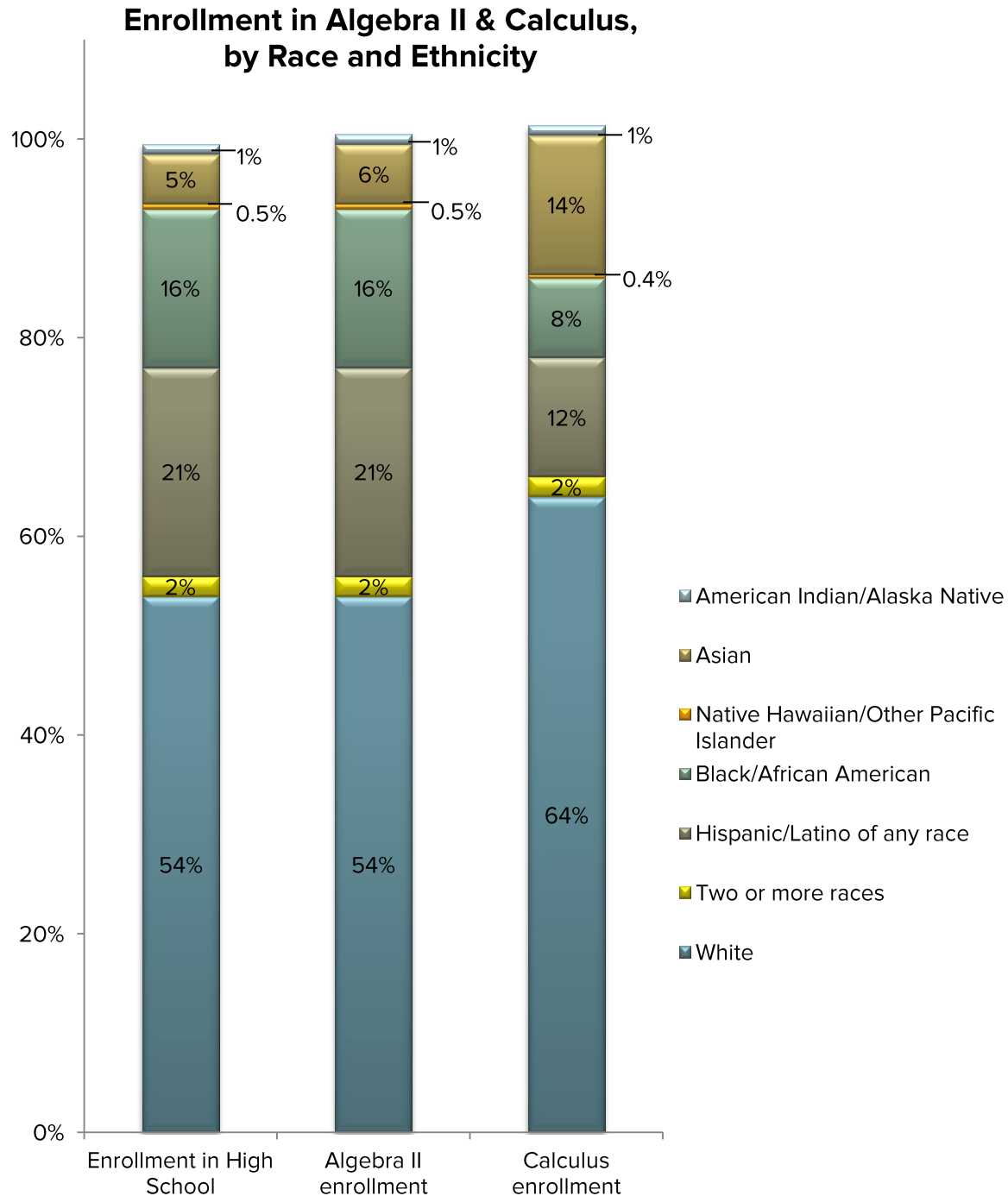
Figure 2. *High School Course Offerings, by Black/Latino Student Enrollment*



Source: United States Department of Education, Office of Civil Rights. (2014). *Civil rights data collection data snapshot: College and career readiness*.

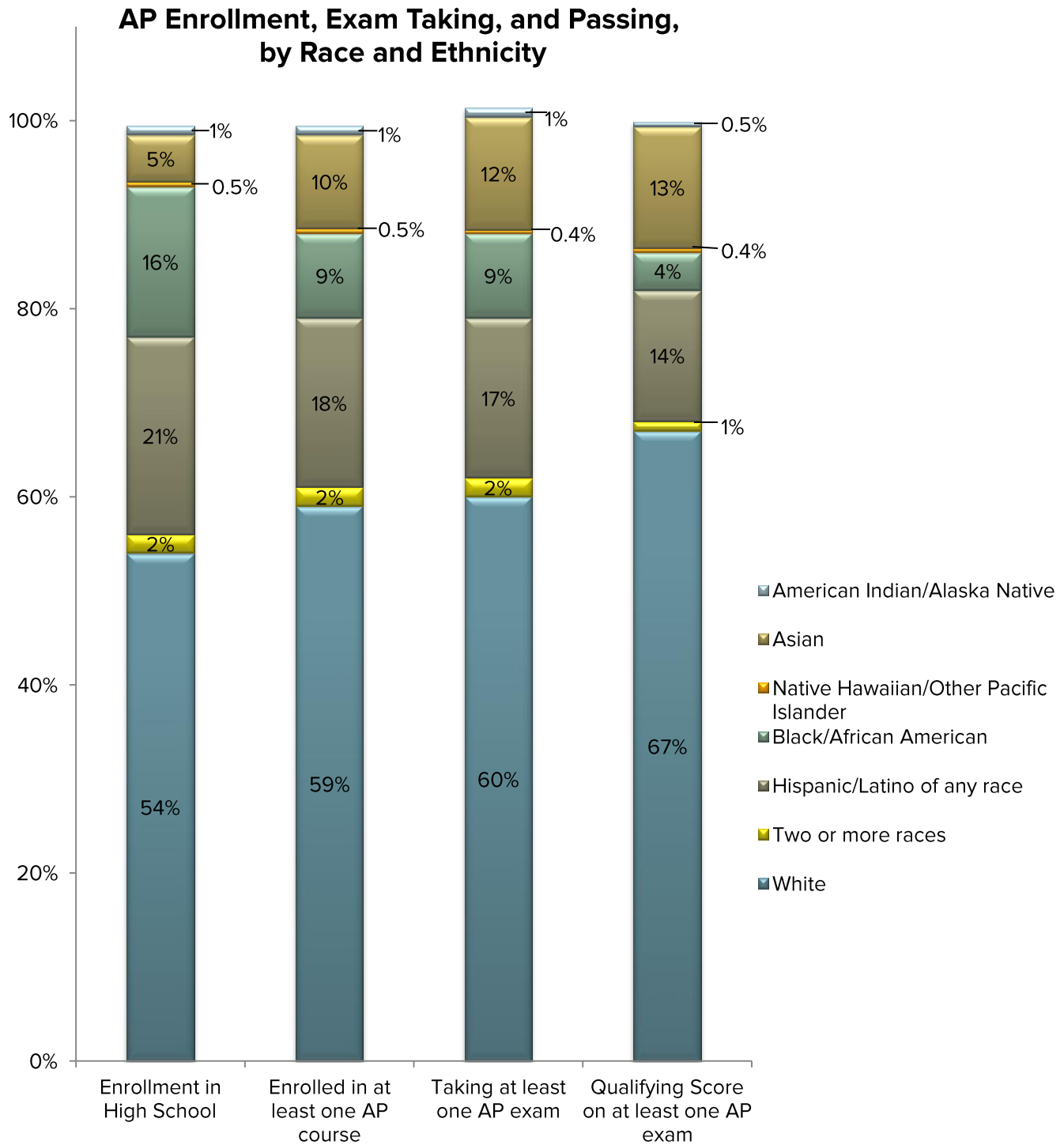
Another common issue among high schools is that despite college preparatory courses being offered, African American students are underrepresented in the enrollment in these classes. Often, African American students are steered into lower level courses instead of college preparatory classes (Moore, et al., 2010). This problem, particularly for low-income students, is rooted in two primary issues: lack of preparation in the earlier grades and lower teacher expectations, both of which will be discussed later in this paper. Figure 3 shows that while African American students make up 16 percent of the high school student population, they comprise just 8 percent of the enrollment in calculus. Figure 4 shows that African American students represent just 9 percent of the pool of students taking advanced placement courses and just 4 percent of students who earn a qualifying score on an advanced placement examination. Further analysis reveals that African American female students are more likely to take many higher-level college preparatory classes than their African American male peers (Bryant, 2013).

Figure 3. Enrollment in Algebra II & Calculus, by Race and Ethnicity



Source: United States Department of Education, Office of Civil Rights. (2014). *Civil rights data collection data snapshot: College and career readiness*.

Figure 4. AP Enrollment, Exam Taking, and Passing, by Race and Ethnicity



Source: United States Department of Education, Office of Civil Rights. (2014). *Civil rights data collection data snapshot: College and career readiness.*

Teacher Quality

The success of students in high school hinges primarily on strong teachers. While low-income students have struggles outside the school building, there are numerous examples of schools serving low-income youth where the students are thriving academically and taking very challenging courses. This demonstrates that culture or racial background do not inherently prevent the achievement of students (Moore, Slate, Edmonson, Combs, Bustamante, & Onweugbuzie, 2010). Evidence suggests that the quality of teaching students receive is the most important in-school factor affecting their achievement (Thompson, Warren, Foy, & Dickerson, 2008). There are three aspects of teacher quality that are important for students to achieve at the high school level and be college ready: high-level instruction in challenging courses, high expectations from teachers, and positive relationships with teachers and other school staff (Flores, 2007; Reid & Moore, 2008). Many African American students, especially those in high poverty areas, attend schools where these critical elements are not in place.



A major difference between schools that serve high proportions of African American students and those that do not is the number of well-qualified, highly experienced teachers (Flores, 2007). Unfortunately, schools with a low number of experienced teachers frequently produce students who are unprepared for college. Currently, African American students are four times more likely than white students to attend a school where 80 percent or fewer teachers are certified (U.S. Department of Education, 2014b). Four percent of African American students attend a school where more

than 20 percent of teachers are in their first teaching year, as compared to only one percent of white students (United States Department of Education, 2014b). This mismatch between teacher placement and student need often results in lower academic attainment for African American students.

Many African American students who graduate from high school do not attend college. Those who do enroll in college often find themselves in need of developmental or remedial courses in order to be successful. Remediation is a large issue for African American students, as too many enrolling in college are realizing they need academic strengthening before they can take on real college-level material. Statistics show that students enrolled in remedial courses are far less likely to graduate from college (Strong American Schools, 2008). However, this issue can be avoided by ensuring that more highly qualified and experienced teachers are teaching in low-income schools. Research reveals that the combination of teacher credential status, years of teaching experience, and educational attainment have statistically significant effects on the remediation rates of students enrolling in college (Guarino, Brown, & Wyse, 2011; Howell, 2011). According to Howell (2011), a

high school's proportion of teachers with a master's degree is generally commensurate with its rate of English remediation. The correlation is particularly strong in schools with high minority student populations.

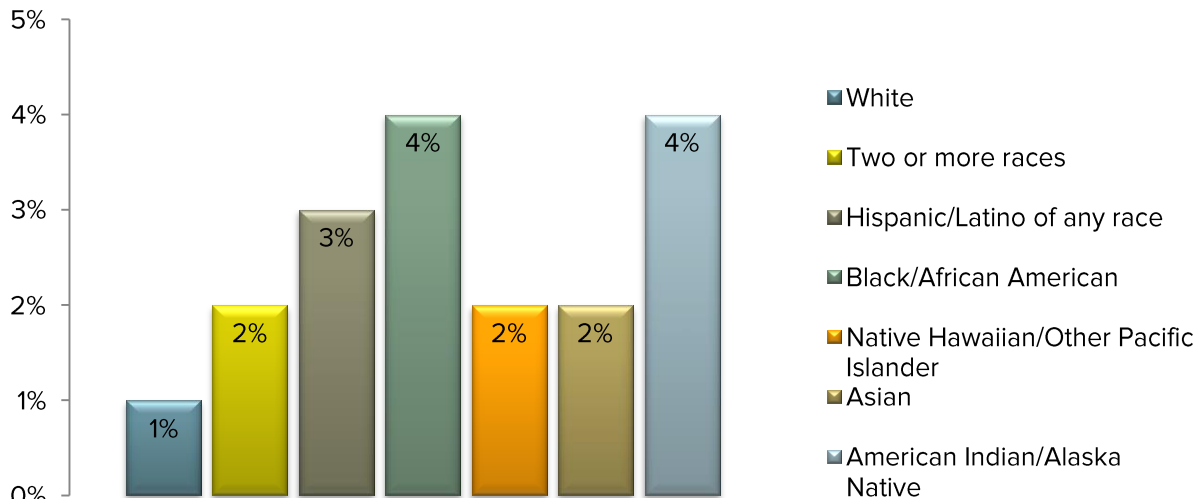
In addition to experience and expertise, the relationship between teachers and their students must be strong in order to foster academic success. White teachers often assume that African American students' learning and achievement struggles are a result of student deficits, such as lack motivation, lack of work ethic, and limited family support. These assumptions persist because teachers fail to invest in understanding and building relationships with individual students (Flores, 2007). This deficit perspective is damaging because it shapes and directs the attitudes and actions of teachers with their students. It is necessary for teachers to understand their own unconscious or conscious racial and gender biases and to work toward a more positive understanding of race, class, and masculinity. In addition, training in culturally relevant pedagogy is key to understanding students' home culture, as well as the sociopolitical consciousness of students (Thompson et al., 2008). This will enable teachers to educate according to student strengths rather than perceived deficits and to establish authentic relationships with students based on respect and understanding (Welton & Martinez, 2014).

A major issue in high-minority schools is difficulty attracting and retaining teachers with the expertise and experience known to make a difference for students. This is particularly difficult in schools that also have high proportions of students living in poverty. Both within and across districts, the best teachers are more apt to work in the most affluent schools. In fact, in some states, the issue of inequitable distribution of teachers is more pronounced *within districts* than across the state (Clotfelter et al., 2005). Schools serving large numbers of low-income, minority children struggle more to attract and keep the most desirable teachers for two reasons: the work in these schools is inherently more difficult; and state accountability systems fail to ensure schools are meeting standards. Pay-for-performance policies make it difficult to keep teachers in these schools because when the schools do not meet expected targets, teachers are not rewarded (Guarino, et al., 2011). Consequently, turnover is very high; teachers leave failing schools for more stable positions, resulting in unequal distribution of teacher qualifications (Clotfelter et al., 2005). Since equitable distribution of the best teachers will not happen naturally, districts and states need policies to address the disparity and counteract current trends (Clotfelter et al., 2005; Guarino et al., 2011; Howell, 2011).

One of the most important elements of college readiness for African American students is great teachers. Students need strong teachers who are well-educated, experienced, and equipped with cultural proficiency. The ability to foster higher-order academic behavior and push students to be critical thinkers is key to future college success. This requires both high expectations and trust. Teachers must believe that African American students are capable of these skills and cultivate them with culturally relevant methods. Teachers must also have authentic relationships with students to build a foundation of trust.

Unfortunately, very few of these skilled teachers are present in high-poverty, high-minority schools. In most *Figure 5. AP Percent of Students Attending Schools Where More than 20% of Teachers are in First Year of Teaching* teachers in low-income schools that have been deemed low performing. Subsequently, African American high school students are not receiving the quality instruction they need. Figure 5 shows that across all public schools, African American students are twice as likely as whites to be enrolled in a school where 20 percent or more of the teachers are in their first year. At the high school level specifically, analysis of the nation's 100 largest school districts reveals that the schools with the largest African American and Hispanic enrollments have 1.5 times more novice teachers than schools with largely white enrollments (see Table 1)¹. The highest-poverty African American and Hispanic schools are most affected.

Percent of Students Attending Schools Where More Than 20% of Teachers are in First Year of Teaching



Source: United States Department of Education, Office of Civil Rights. (2014). *Civil rights data collection data snapshot: College and career readiness*.

Table 1. Likelihood of Having Novice Teacher, High Schools in Nation's 100 Largest Districts (2011-12)

	Total Percent Novice Teachers (1 st and 2 nd year)	Percent of Certified Teachers
High Schools with Largest Black and Latino Student Enrollment	13.5%	91%
High Schools with Smallest Black and Latino Student Enrollment	9%	95%

¹ For this analysis, author compared high schools within the 100 largest school districts in the United States that have at least 75 percent combined African American and Hispanic enrollments with schools that had at least 75 percent white student enrollment.

The Role of School Counselors

School counselors are a vital asset to students seeking to enter college after high school graduation. The College Board identifies eight components of college and career counseling for school counselors seeking to inspire and prepare students:

- College Aspirations;
- Academic Planning for College and Career Readiness;
- Enrichment and Extracurricular Engagement;
- College and Career Exploration and Selection Processes;
- College and Career Assessments;
- College Affordability Planning;
- College and Career Admission Processes; and
- Transition from High School Graduation to College Enrollment (The College Board, 2010, p. 3).

According to research on college and career planning, schools counselors can be highly effective advocates, helping students identify their best options based on their potential and goals (Ward, 2006). Counselors must have high expectations for all students and work collaboratively to ensure their success (Bryan, Holcomb-McCoy, Moore-Thomas, & Day-Vines, 2009; Reid & Moore, 2008). In their roles as advocates, school counselors should work with low-income African American students and their families to address marginality, culture, and power relationships that limit college preparedness (Holcomb-McCoy, 2010).

Research shows that academic planning is an especially important role. Counselors need to take greater steps to ensure African American students take mathematics courses beyond the minimum required for graduation. (Long et al., 2009; Reid & Moore, 2008; Ward, 2006). While African American students are shown to take more mathematics credits than other racial and ethnic groups, these are frequently lower-level courses that do not aid in college preparation (Musoba, 2011). Without guidance, students often don't realize that not taking rigorous high school courses hurts their college prospects (Reid & Moore, 2008; Welton & Martinez, 2014). Encouraging students to take the full complement of courses designed to prepare them for higher education (such as algebra II, advanced mathematics, pre-calculus, calculus, chemistry, and physics) is key to their success.

Positive, authentic relationships between students and counselors are very important to creating college expectations. Counselors need to be mindful of the overt and underlying messages sent to students through their words and actions (Bryan et al., 2009).



Public school students are less likely to seek college information when they perceive that their counselor does not expect them to go to college or when they are unclear on their counselor's aspirations for them (Bryan et al., 2009). As such, counselors should be more intentional in the messages they give to students about their expectations and aspirations (Bryan et al., 2009). Race and gender issues are very important in this context because young people interpret messages differently based on their backgrounds and experiences. Research shows that African American females are actually the most likely group to

seek out school counselors for college information (Bryan et al., 2009). Counselors need to be mindful of gender, race, and socioeconomic status in the student-counselor relationship (Bryan et al., 2009).

Relationships between school counselors and parents are equally important. Parental education level is an important predictor of educational attainment and college enrollment for their children (Ward, 2006). African American parents are less likely to have attended college; therefore, they need more access to information, resources, and support to assist their children in college enrollment. Important areas for parental education include applications, admissions processes, financial aid, testing, tours, and other key elements (Bryan et al., 2009; Holcomb-McCoy, 2010; Reid & Moore, 2008; Ward, 2006). To be effective, school counselors must be knowledgeable about trends and creative practices in parent engagement; this allows them to cultivate productive school-family-community partnerships (Holcomb-McCoy, 2010; Reid & Moore, 2008; Wallace, 2013). As these relationships are developed, counselors must take into account the experiences, values, and norms of African American parents (Holcomb-McCoy, 2010; Wallace, 2013). It is essential that counselors believe that African American parents, regardless of socioeconomic status, value education and support their children's educational goals (Holcomb-McCoy, 2010).

Many school counselors feel their graduate training did not adequately prepare them for this role in urban settings with minority and low-income students. In particular, counselors cite that there are few opportunities to discuss the urban education context and no coursework on college readiness counseling (Savitz-Romer, 2011). These major gaps in training and preparation must be addressed. The combination of lack of training and overburdened caseloads causes far too many students to fall through the cracks.

School counselors play a pivotal role in college readiness for African American students. Just as with teachers, training, high expectations, and authentic relationships are essential for counselors to prepare their students for college. Far too often, African American students are steered toward less rigorous postsecondary options because counselors are skeptical that they can succeed in college environments. In addition, the nation's

student-to-counselor ratio is far too high, making it difficult to provide the high-quality, individualized support that students need. To effectively address the issue of college readiness for African American students, schools must reform pre-service training, reduce ratios, and ensure relationships with students and their families are based on trust and high expectations.

The recommended student-to-counselor ratio is 250-to-1 (Bemak, Chi-Ying, Siroskey-Sabdo, 2005). However, the current average in the United States is 471-to-1 (American School Counselor Association, 2013). An astounding 20 percent of high schools have no school counselor at all (US Department of Education, 2014a). Smaller and more affluent schools tend to have smaller counselor-to-student ratios and more college focus (Bryan et al., 2009; Holland & Farmer-Hinton, 2009). This disparity is devastating for schools serving mostly low-income African American students, because these students and their families require far more support to navigate the college process from academic planning through actual college enrollment. It is virtually impossible for a counselor to perform those higher-intensity tasks with a large caseload of students at various stages of their high school experience. Among high schools in the nation's 100 largest school districts, the student-to-counselor ratio is slightly lower for high schools with large enrollments of African American and Hispanic students (see Table 2). This is encouraging, as it demonstrates recognition that these students have greater needs. However, the ratio is still not sufficient to allow counselors to effectively support their students. In addition, it should be noted that among the high schools sampled, high-minority schools are still more likely to have no counselors than predominantly white schools (see Table 2).

Table 2: Student: Counselor Ratios, High Schools in Nation's 100 Largest Districts (2011-12)

	Student : Counselor Ratio	Percent of Schools with No Counselor
High Schools with Largest Black and Latino Student Enrollment	332 : 1	9.4%
High Schools with Smallest Black and Latino Student Enrollment	368 : 1	6.5%

Implications for Public Policy

Research on disparities in education for African American students has significant implications for public policy at the federal, state, and district levels. In today's education reform climate, where the push is for high achievement and greater accountability, it is important to remain focused on equity across all schools and for all students. Students should only be held to standards that their schools are equipped to help them meet. Furthermore, it is wrong to hold African American students solely culpable for not transcending their economic

status when their public education has not prepared them for postsecondary opportunities. These gaps in quality often have multi-generational consequences, and are responsible for much of the lack of upward mobility of African American families. Deeper study of these issues is necessary to ensure public policies are responsive to *all* students. Policy implications include but are not limited to:

1. **School finance reform.** Schools should be financed in a manner that is equitable—though not necessarily equal—in order to provide high-quality education to every public school student. Legal proceedings that draw on research documenting education disparities are one way to drive school finance reform.
2. **School, district, and teacher accountability policies and incentives.** These policies should be subject to racial equity analysis to determine whether they exacerbate or ameliorate teacher distribution and equity within and across districts, as well as across states.
3. **Accreditation requirements for teacher and counselor pre-service training programs.** Accreditation should require that programs place greater emphasis on cultural proficiency and use of culturally relevant pedagogy to prepare teachers and counselors to serve highly diverse student populations.
4. **Advocacy for mandated student-to-counselor ratios.** It's critical to reduce these ratios, particularly in high-poverty, high-minority schools where the level of support needed per student or family is greater than in more affluent schools.
5. **Equal access to rigorous, college-preparatory coursework.** Elementary and middle schools should provide rich coursework that prepares students for difficult high school courses. In addition, school districts should consider promising innovations that provide access to rigorous coursework, including cross-school classrooms, dual enrollment, and teacher-supported online learning.
6. **Parental engagement policies and practices to meet student and family needs.** District policies around parental engagement ought to be more robust. Schools should develop more innovative ways to engage parents and provide information and supports to prepare students for collegiate opportunities.
7. **Higher education policies for supportive services for low-income and first-generation students.** Students need varying levels of support upon entering college, particularly until K-12 reforms are fully implemented. Provision of appropriate supports is necessary to ensure persistence and completion.
8. **Higher education financial aid policies.** Current financial aid policies put low-income, minority, and first-generation college students at a disadvantage, particularly those who need remedial courses due to insufficient preparation in high school. These students' needs must be considered as policies are developed.

Gaps in course provision, teacher quality, and access to school counselors must be analyzed to improve college readiness for African American students. By strengthening school practices, as well as district, state, and federal education policies, we can open doors to postsecondary success.

Perhaps the greatest challenge is dispelling myths about African American students' abilities and inspirations. Stereotypes inform many behaviors that block progress and prevent students from reaching their full potential. Fortunately, there is a strong body of research debunking the myth that African American children and their families are primarily at fault for not being prepared for college. This one-sided notion of "personal responsibility" and blame has allowed substandard schools to escape accountability for providing low-quality education.

Conclusion

African American students are less likely to succeed in college because the high schools they attend do not properly prepare them. Generally, high-minority schools, particularly those with significant numbers of low-income students, are lacking in several ways. First, these schools have more novice and non-certified teachers than affluent schools. Teachers early in their careers are not as knowledgeable about classroom management, relationship building, or course content. These skills take time to develop, and students are at a disservice when too many of their teachers are new to the profession or are not certified to teach particular subjects. Second, these schools offer fewer high-level mathematics and science courses that prepare students for the rigors of college. Without these courses, which cultivate higher-order thinking skills, students are forced to take remedial classes in college to be successful. Third, high-minority high schools are less likely to have school counselors. Those that do have counselors assign them overwhelming caseloads that make it impossible to provide African American students and their families the support they need in the college preparation process. Fourth, many teachers and counselors have not developed sufficient relationships with students and their parents to truly understand their cultures, life histories, and sociopolitical circumstances. Without this understanding, teachers and counselors fall prey to stereotypes about African American students and their families. These stereotypes (lazy, indifferent, lack of follow-through, etc.) cause teachers and counselors to both consciously and subconsciously lower their standards for African American students. Continued work in this field is essential to help shape federal, state, and local policies that improve education quality for African American students.

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